



2015-101 Street Improvement Project
PRELIMINARY REPORT OF ENGINEER

To the City Council
City of Bloomington
Hennepin County, Minnesota

The undersigned engineer, to whom the following proposed improvements were referred, hereby reports that said improvements are necessary, cost-effective and feasible and should best be made as proposed.

The estimated cost of the entire project is approximately:

Improvements	\$7,100,000
Plus 26% Engineering Costs, Bonds and Legal Fees	<u>\$1,900,000</u>
Total Cost	\$9,000,000

Said improvements consist of grading, base reconstruction, bituminous resurfacing, concrete curb and gutter placement, street reconstruction, and storm sewer, sanitary sewer and watermain modification, all as described in the attached Feasibility Report.

Dated this 3rd day of November 2014.

Shelly A. Pederson
City Engineer
Registration No. 25463

SAP/jd

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Preliminary Report / Feasibility Study

2015 Pavement Management Program (PMP)

Street Reconstruction Project

City Project Number 2015-101

I. Scope of Work

In 1991, the City of Bloomington City Council approved the Bloomington Pavement Management Program (PMP). The program consists of three levels of street maintenance:

- Seal Coat
- Mill and Overlay
- Reconstruction

This report analyzes the feasibility of completing the street reconstruction portion of the PMP. Streets proposed for reconstruction are listed at the end of this report (Appendix Section A). The streets that are proposed have an unstable base and subbase, along with surface irregularities. In general, this work includes streets that have a Pavement Condition Index (PCI) of below 35 on a scale of 100 under the Pavement Management Program rating system and/or have been visually inspected to show the need for reconstruction.

Street reconstruction consists of removing the existing bituminous surface and base materials. If necessary, the street area will be graded to correct any unstable subbase conditions. Grading is also required to prepare for curb and gutter construction, if the street doesn't already have curb and gutter.

All streets that are reconstructed with the PMP are reconstructed to either a 10-ton or 7-ton standard depending on requirements for each street based on traffic volumes. 10-ton street segments, include 6-inches of class 5 rock and 3 layers of 2-inch thick bituminous pavement. 7-ton street segments include 6-inches of class 5 and 2 layers of 2-inch thick bituminous pavement.

For streets without existing curb and gutter, concrete curb and gutter will be placed on both sides of the street. Per the City policy, all streets on the 2015 PMP Street Reconstruction project will be reconstructed to the standard width of 32 feet, excluding Old Cedar Avenue, which is anticipated to vary in width from 26 feet to 44 feet. On streets that already have curb and gutter, replacement will be done for segments of the curb and gutter that are damaged, settled, or disrupting drainage.

ENGINEERING DIVISION

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AN AFFIRMATIVE ACTION/EQUAL
OPPORTUNITIES EMPLOYER

On February 27, 2012, the City Council approved the City of Bloomington Complete Streets Policy. Per the policy, the Project Engineer will use a Complete Streets checklist to document any potential Complete Streets amenities to include with the project. A couple of items on the check list include checking for ADA compliance issues and checking existing or planned trip generators in the project vicinity that may attract bicyclists, pedestrians, or transit users. Any Complete Streets opportunities will be identified and potentially implemented in the project design.

All of the existing sanitary sewer, watermain and storm sewer infrastructure located under proposed reconstruction streets will be evaluated to see if repair or replacement is needed. Since the street will be opened up for the street reconstruction project, any necessary underground utility work will occur with this project. On streets without curb and gutter, additional storm catchbasins and storm sewer pipes may be needed to convey storm water.

II. Project Cost Estimate

The estimated project costs are summarized in the table below:

Construction Costs	\$6,400,000
12% Contingency	\$700,000
26% Design and Project Administration	\$1,900,000
Total	\$9,000,000

A more detailed cost breakdown is attached to this report (Appendix Section B).

III. Project Funding

The project is being funded by a mix of local funds and special assessments with the following breakdown:

Special Assessment	\$2,300,000
PIR/GO	\$5,300,000
Storm Water Utility	\$1,100,000
Sewer and Water Utility	\$300,000
Total	\$9,000,000

A more detailed funding summary is included after this report (Appendix Section D).

IV. Special Assessments

Based on property value review by City Staff, all properties included in the assessable area and/or the area of notification receive special benefit from the proposed improvements in this report. The special benefit received by each property is in excess of the estimated amount specially assessed to each. The City of Bloomington Assessment Policy will be applied in all instances. For the PMP, four estimated assessment rates are calculated:

Surfacing: 25% rate (single and two family)	\$47
Surfacing: 50% rate (all other properties)	\$94
Curb and gutter: 25% rate (single and two family)	\$26
Curb and gutter: 50% rate (all other properties)	\$52

The calculations for determining the estimated assessment rates are included at the end of this report (Appendix Section C).

V. Design and Construction Schedule

Plans will be designed by the City of Bloomington Engineering Division. It is proposed that construction will begin in the spring of 2015 and be mostly completed in the fall of 2015, with the potential of some restoration and punchlist items occurring in the spring of 2016.

The reconstruction of Old Cedar Avenue will begin after July 1, 2015 and may take part of the 2015 and 2016 construction seasons to complete. At this time, the Old Cedar Avenue Bridge Rehabilitation project will also be under construction as well and coordination of schedules will be necessary. In order to minimize economic impacts on the local businesses, minimal construction operations on Old Cedar Avenue will take place between May 1 and July 1.

Appendix
Preliminary Report / Feasibility Study
2015 Pavement Management Program (PMP)
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A. LIST OF STREETS

Ref. No.	Street	From	To
1	1st Avenue South	East 102nd Street	East 100th Street
2	11th Avenue South	East 100th Street	East 98th Street
3	West 95th Street	Pleasant Avenue South	Nicollet Avenue South
4	Old Cedar Avenue	East Old Shakopee Road	South Terminus
5	Dupont Avenue South	West 92nd Street	West 90th Street
6	West 90th Street	Lyndale Avenue South	Wentworth Avenue South
7	Park Avenue South	East 90th Street	East 88th Street
8	Lyndale Avenue South	West 86th Street	West 82nd Street
9	West 89th Street	Girard Avenue South	Bryant Avenue South
10	Fremont Avenue South	West 90th Street	West 86th Street
11	Emerson Avenue South	West 90th Street	West 87th Street
12	Colfax Avenue South	West 89th Street	West 86th Street

B. COST ESTIMATE SUMMARY

Surfacing	\$ 4,129,836.16
Curb & Gutter	\$ 1,250,251.50
Storm Sewer	\$ 782,640.70
Water & Sewer	\$ 190,877.15
Subtotal	\$ 6,353,605.51
Plus 12% Contingency	\$ 762,432.66
Plus 26% Engineering Costs, Bonds and Legal Fees	\$ 1,850,169.92
Total Construction Cost Estimate	\$ 8,966,208.09

NON-ASSESSED COST ESTIMATE DETAIL

Storm Sewer

Estimated Storm Sewer Cost	\$ 782,640.70
Plus 12% Contingency	\$ 93,916.88
Estimated Construction Cost	\$ 876,557.58
Plus 26% Engineering Costs, Bonds & Legal Fees	\$ 227,904.97
Total Estimated Storm Sewer Cost (Storm Utility Fund)	\$ 1,104,462.55

Water & Sewer

Estimated Water & Sewer Cost	\$ 190,877.15
Plus 12% Contingency	\$ 22,905.26
Estimated Construction Cost	\$ 213,782.41
Plus 26% Engineering Costs, Bonds & Legal Fees	\$ 55,583.43
Total Estimated Water & Sewer Cost (Sewer and Water Utility Funds)	\$ 269,365.84

C. ASSESSMENT CALCULATIONS

Surfacing

Estimated Surfacing Cost	\$ 4,129,836.16
Plus 12% Contingency	\$ 495,580.34
Estimated Construction Cost	\$ 4,625,416.50
Plus 26% Engineering Costs, Bonds & Legal Fees	\$ 1,202,608.29
Total Estimated Surfacing Cost	\$ 5,828,024.79

<i>Estimated Assessment</i>	<i>Percentage</i>	<i>Estimated Assessable Frontage</i>	<i>Estimated Rate</i>	<i>Estimated Assessment</i>
Rate Code: 16R	25%	21892	\$ 47.16	\$ 1,032,426.72
Rate Code: 16O	50%	9002	\$ 94.33	\$ 849,158.66
Total Assessment		30894	\$ 188.65	\$ 1,881,585.38

Estimated Surfacing Cost less Assessment (PIR/G.O. Cost) **\$ 3,946,439.41**

Curb & Gutter

Estimated Curb & Gutter Cost	\$ 1,250,251.50
Plus 12% Contingency	\$ 150,030.18
Estimated Construction Cost	\$ 1,400,281.68
Plus 26% Engineering Costs, Bonds & Legal Fees	\$ 364,073.24
Total Estimated Curb & Gutter Cost	\$ 1,764,354.92

<i>Estimated Assessment</i>	<i>Percentage</i>	<i>Estimated Assessable Frontage</i>	<i>Estimated Rate</i>	<i>Estimated Assessment</i>
Rate Code: 52R	25%	15340	\$ 25.48	\$ 390,863.20
Rate Code: 52O	50%	1974	\$ 50.95	\$ 100,575.30
Total Assessment		17314	\$ 101.90	\$ 491,438.50

Estimated Curb & Gutter Cost less Assessment (PIR/G.O. Cost) **\$ 1,272,916.42**

D. FUNDING SUMMARY

	Special Assessment	City/State Assessed Properties	PIR/GO	Storm Water Utility Fund	Sewer and Water Utility Fund	Total
1) Storm Sewer	\$ -	\$ -	\$ -	\$ 1,104,462.55	\$ -	\$ 1,104,462.55
2) Sanitary Sewer & Water	\$ -	\$ -	\$ -	\$ -	\$ 269,365.84	\$ 269,365.84
3) Surfacing (PMP)	\$ 1,845,271.83	\$ 36,313.55	\$ 3,946,439.41	\$ -	\$ -	\$ 5,828,024.79
4) Curb and Gutter (PMP)	\$ 485,374.26	\$ 6,064.24	\$ 1,272,916.42	\$ -	\$ -	\$ 1,764,354.92
TOTAL	\$ 2,330,646.09	\$ 42,377.79	\$ 5,219,355.83	\$ 1,104,462.55	\$ 269,365.84	\$ 8,966,208.10